

## ABSTRACT

The present invention relates to a method of forming a tunnel oxide film in a semiconductor device, in which a predetermined thickness of the oxide film is not removed during a process of removing the oxide film in a memory cell area and a low voltage transistor area after a gate oxide film for a high voltage transistor is formed, thereby preventing increase of surface roughness on a substrate and contamination caused by absorbed carbon components which are generated when the oxide film and the photo resist film are removed. Therefore, it is possible to form a tunnel oxide film having an excellent film quality.